IN THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. – 15.   (Canceled)

16.   (Currently Amended) ~~The method according to claim 15,~~ A method of infusing a fluid into a body of a user, the method comprising:

obtaining a blood glucose concentration of the user;

generating a controller input based on the blood glucose concentration;

generating commands by a proportional plus, integral plus, derivative (PID) controller from the controller input using at least one preset controller gain, wherein the PID controller is a bilinear PID controller; and

infusing a liquid based on the commands from the PID controller;

wherein the bilinear PID controller accurately estimates a hypoglycemic glucose excursion.

17. – 31.   (Canceled)

32.   (Currently Amended) ~~The system according to claim 31,~~ A system for infusing a fluid into a body of a user, the system comprising:

means for obtaining a blood glucose concentration of the user;

means for generating a controller input based on the blood glucose concentration;

means for generating commands by a proportional plus, integral plus, derivative (PID) controller from the controller input using at least one preset controller gain, wherein the PID controller is a bilinear PID controller; and

means for infusing a liquid based on the commands from the PID controller;

wherein the bilinear PID controller accurately estimates a hypoglycemic glucose excursion.